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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,967	03/18/2004	Seiji Inaba	16869N-110000US	7861
20350 7590 07/13/2007 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			EXAMINER MUHAMMED, ABDUKADER S	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/804,967	<b>Applicant(s)</b> INABA, SEIJI	
	<b>Examiner</b> Abdukader Muhammed	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 and 20 is/are allowed.
- 6) ☒ Claim(s) 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                       |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Objections*

2. Claims 1, 14, 18, and 19 are objected to because of the following informalities:

In claim 1, line 8 “manaqing each of said first area” should be “managing each of said first area”.

Claims 14 and 18 recite the limitation “said control unit confirms the fact that said optical pickup has been positioned in *said third area* on the basis of the fact that *said second time* information has been read out by said optical pickup” in lines 6-9. It is not how the third area can be confirmed by reading the second time information. According to the independent claims (12 and 17) on which these claims 14 and 18 depend, the second area corresponds to the second time information and the third area corresponds to the third time information. Hence “said third area” should be changed to “said second area”.

Claims 18 and 19, apparatus claims directly or indirectly depend on method claims 16 and/or 17. If claims 18 and 19 are further limiting the method claims (16 and 17), the preamble should clearly indicate that.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “said optical pickup” (claim 16, line 15 and claim 17, line15) lacks clear antecedent basis. No “said optical pickup” has been previously recited in the claim and therefore the limitation cannot be understood.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 12-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Jeong et al. (US Publication 2004/0001397 A1).

Regarding Claims 12 and 13, Jeong et al. teach an optical storage device comprising: an optical pickup for radiating a light beam to an optical disk (optical pickup 40; see figure 4), said optical disk including: a first area having first time information (the management area which includes PCA, PMA and lead-in area; see figure 3); a second area provided on a circumference on the outer side of said first area as an area having second time information undistinguishable from said first time information (the area after the 79:59:74 ATIP mark which includes the lead-out area. This area has ATIP information which is indistinguishable from the first area because of expanded storage capacity; see figure 3 and page 1, paragraph [0009]-[0012]); and a third area provided between said first and second areas as an area having third time information distinguishable from said first time information and said second time information (the program area between the first and second area with ATIP 00:00:00 to 79:59:74; see figure 3); and a control unit for controlling a movement of said optical pickup over said optical disk in a radial direction of said optical disk (microcomputer 80; see figure 4); wherein, in order to move said optical pickup from said first area to said second area, said control unit first moves said optical pickup from said first area to said third area, then, said control unit confirms the fact that said optical pickup has been moved out from said first area to said third area and, finally, said control unit moves said optical pickup from said third area to said second area (Jeong et al. show that if the current location is in the overlapped area (step S15 of figure 5), that is the pick is either in the first area or the second area, the pickup jumps to the second area (if it was in the first area) or to the second area (if it was in the second area). It checks the jumped position at step S18 and repeats the jump at step S19; see figure 5). Claim 13 is the pickup movement in opposite direction from that of claim 12.

Regarding Claim 14, as applied to claim 12 or 13 above and Jeong et al. further teach that the optical pickup has a configuration for reading out said first time information, said second time information and said third time information (the system has ATIP decoder 70 for reading time information; see figure 4); and said control unit confirms the fact that said optical pickup has been positioned in said second area on the basis of the fact that said second time information has been read out by said optical pickup (the microcomputer 80 uses the ATIP decoder 70 as shown in figure 4 and the second area is confirmed when the ATIP information is between 00:00:00 to 79:59:74; see figure 3).

Regarding Claim 15, as applied to claim 14 above and Jeong et al. further teach that the first time information, said second time information and said third time information are each ATIP time information (see figure 3).

Regarding Claim 16 and 17, Jeong et al. teach a seek method adopted by an optical storage device, said seek method comprising the steps of: radiating a light beam to an optical disk including: a first area having first time information (the management area which includes PCA, PMA and lead-in area; see figure 3); a second area provided on a circumference on the outer side of said first area as an area having second time information undistinguishable from said first time information (the area after the 79:59:74 ATIP mark which includes the lead-out area. This area has ATIP information which is indistinguishable from the first area because of expanded storage capacity; see figure 3 and page 1, paragraph [0009]-[0012]); and a third area provided between said first and second areas as an area having third time information distinguishable from said first time information and said second time information (the program area between the first and second area with ATIP 00:00:00 to 79:59:74; see figure 3); controlling

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a radiation position of said light beam on said optical disk; and moving said optical pickup from said first area to said second area by executing the sub-steps of: moving said optical pickup from said first area to said third area; confirming the fact that said optical pickup has been moved out from said first area to said third area; and moving said optical pickup from said third area to said second area (Jeong et al. show that if the current location is in the overlapped area (step S15 of figure 5), that is the pick is either in the first area or the second area, the pickup jumps to the second area (if it was in the first area) or to the second area (if it was in the second area). It checks the jumped position at step S18 and repeats the jump at step S19; see figure 5). Claim 17 is the pickup movement in opposite direction from that of claim 16.

Regarding Claim 18, as applied to claim 16 or 17 above and Jeong et al. further teach that the optical pickup has a configuration for reading out said first time information, said second time information and said third time information (the system has ATIP decoder 70 for reading time information; see figure 4); and said control unit confirms the fact that said optical pickup has been positioned in said second area on the basis of the fact that said second time information has been read out by said optical pickup (the microcomputer 80 uses the ATIP decoder 70 as shown in figure 4 and the second area is confirmed when the ATIP information is between 00:00:00 to 79:59:74; see figure 3).

Regarding Claim 19, as applied to claim 18 above and Jeong et al. further teach that the first time information, said second time information and said third time information are each ATIP time information (see figure 3).

Allowable subject Matter

7. Claims 1-11 and 20 are allowable.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claims 1, 7, 8, and 10, a combination of Lee et al. (US 2004/0081430), Nakamizo (US 6,061,308), Sato et al. (US 6,541,186 B2), Okamoto et al. (US 2001/0055246 A1), Jeong et al. (US 2004/0001397 A1), Ida (US 6,442,109 B1), Yashimoto et al. (US 6,529,451 B2) teach a seek method and an optical storage carrying out the seek method in which the optical disk includes a first area, a second area with time information undistinguishable from time information of said first area and a third area with unique time information and in which the pickup is moved from the present location to a target location using a sled motor.

The references given above single or in combination *fail to show* that the area/zone numbers of the optical disk are recorded in an associative-relation memory (memory specifically provided for managing areas/zones), using a zone-number-storing memory (a second separate memory from the above one) for storing the present position of the optical pickup or for area/zone number of target area/zone, and also the changing of the stored present position area/zone number of the optical pickup by the area/zone number of the target position before a seek operation is carried out.

Regarding Claims 2-6, 9, 11, and 20, these claims are directly or indirectly dependent to the above claims.

### ***Conclusion***

9. The prior art made of record in PTO-892 Form and not relied upon is considered pertinent to applicant's disclosure.



Lee et al. (US 2004/0081430) teach an apparatus and a method to determine an area of an optical disc in which an inner area and an outer area of the optical disc having an absolute time of 99 minutes are distinguished from each other by referring to a number of ATIP syncs.

Sato et al. (US 6,541,186 B2) teach an optical disk divided into different areas/zones according to their ATIP time code (see figure 8A).

Okamoto et al. (US 2001/0055246 A1) teach a seek method which calculates the number of tracks to be jumped between the present position of the optical pickup and the target position.

Ida (US 6,442,109 B1) teaches a seek method and a drive-means control apparatus that includes a target position calculating means (58) for calculating a target track number based on a head logic address of a track to be accessed, a current position calculating means (60) for calculating a current track number based on a current address, a number-of-tracks calculating means (61) for, based on the target track number and the current track number, calculating the number of tracks by which the optical pickup (2) is to be moved (see figures 3-6).

Yashimoto et al. (US 6,529,451 B2) teach a seek method which identifies the zone number from the read logical address and determines the number of physical tracks to be traversed from the target address and the present physical address (see figure 16).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdukader Muhammed whose telephone number is (571) 270-1226. The examiner can normally be reached on Monday-Thursday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. Customer Service can be reached

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at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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03 July 2007

  
WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER